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Groover & Associates

SHEFFIELD SAW TOOL 972-380-4445 PAGE 01

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MAY 2 8 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Turfitt

· Art Unit: 3724

AN 10/080,268

: Examiner: Goodman, Charles

Filed: 02/19/2002

: Atty's Docket: LARUE-8

For: Polycrystalline Cubic Boron Nitride (PCBN) Woodworking Tools and Methods (confirmation no. 6966)

RULE 132 DECLARATION

Honorable Commissioner of Patents and Trademarks Washington, DC 20231

Sir:

- l. Ronald Turfitt, residing at 5055 Rosewood Drive, Doylestown, PA 18901, declare that I have performed the following successful field test results for BZN-tipped saw blades:
- 1.) A 12" diameter test blade with 80 BZN (i.e. polycrystalline cubic boron nitride) teeth was employed in cutting a non-ferrous metal, specifically aluminum. The blade was employed on a "Chop Saw" that cuts through the material using a downward vertical motion, retracting upwards through the cut it has made. The speed on this particular machine was reported to be between 3600-4000 rpm.
- 2.) This test blade was manufactured to the same geometric tooth specifications as its carbide-tipped counterpart. During this field test, the results indicated a positive longevity ratio of between 3:1 and 4:1. The quality of cut was slightly better with the test blade, and the aluminum residue tended not to collect on the sides of the teeth as it did with the conventional carbide-tipped blade. Furthermore, several pieces of ferrous material were cut with this test blade successfully, and when switched back

Rule 132 Declaration - Application No. 10/080,268...... Page 1

05/09/2004 05:05 2152308866 May 25 04 03:09p Groover

SHEFFIELD SAW TOOL

4 Resociates 972-3

972-380-4445

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PAGE

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to aluminum cutting, showed no signs of deterioration regarding the quality of the cut edges.

- 3.) The BZN-tipped saw blades proved themselves to be superior to carbide-tipped saw blades in longevity, and in some cases, quality of cut. Maintenance, repair, and sharpening can be achieved using conventional equipment for only a marginal difference in cost to the end user. The only deterrent would be the initial purchase of the saw blade, due to the high cost of the BZN tips. Since the BZN saw blade has a distinct advantage over the PCD saw blade with regard to maintenance, sharpening cost, and the ability to saw ferrous materials, a reduced price in the manufacturing of BZN tips would make this type of blade a serious contender, and a much casier "sell" to the consumer.
- 4.) I further declare that all statements made of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and may jecpardize the validity of the present application or any patent issued thereon.

Signature /

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